

Notice of Allowability

Application No.

10/699,048

Examiner

Leith A. Al-Nazer

Applicant(s)

VANCE, SCOTT L.

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 16 May 2005.
2. ☒ The allowed claim(s) is/are 1-16, 18-23 and 27-29.
3. ☒ The drawings filed on 31 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-16, 18-23, and 27-29 are allowed.

2. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach one or more of the limitations found in independent claims 1, 15, and 27. European patent application publication no. EP 1 351 334 A1 to Tan et al., U.S. patent application publication no. 2003/0160728 to Fukushima et al., and U.S. patent application publication no. 2005/0024272 to Ponce De Leon et al. all teach similar systems to that of the present application. However, with respect to independent claims 1 and 15, Tan, Fukushima, and Ponce De Leon all fail to teach or suggest the floating parasitic element being configured to resonate in the first frequency band. With respect to independent claim 27, Tan, Fukushima, and Ponce De Leon all fail to teach or suggest the floating parasitic element being coplanar with the second planar inverted-F antenna branch and being configured to electromagnetically couple to the second planar inverted-F antenna branch.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation of Pertinent References

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent documents listed below further show the state of the art with respect to planar inverted-F antenna configurations. Specifically, all of the following patent documents teach a planar inverted-F antenna including a parasitic element that is not "floating" but rather is connected to a ground plane:

- a. European patent application publication no. EP 1 128 466 A2 to Annamaa et al.
- b. U.S. patent application publication no. 2004/0212545 A1 to Li et al.
- c. U.S. patent application publication no. 2004/0207559 A1 to Milosavljevic
- d. U.S. patent application publication no. 2004/0198293 A1 to Sadler et al.
- e. U.S. patent application publication no. 2003/0098812 A1 to Ying et al.
- f. U.S. patent application publication no. 2002/0075187 A1 to McKivergan
- g. U.S. patent application publication no. 2002/0070902 A1 to Johnson et al.
- h. U.S. patent application publication no. 2001/0050643 to Egorov et al.
- i. U.S. patent application publication no. 2001/0048391 to Annamaa et al.
- j. U.S. patent no. 6,876,329 B2 to Milosavljevic
- k. U.S. patent no. 6,831,607 B2 to Hebron et al.
- l. U.S. patent no. 6,788,257 B2 to Fang et al.
- m. U.S. patent no. 6,759,989 B2 to Tarvas et al.
- n. U.S. patent no. 6,734,825 B1 to Guo et al.
- o. U.S. patent no. 6,639,560 B1 to Kadambi et al.

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- p. U.S. patent no. 6,573,869 B2 to Moore
- q. U.S. patent no. 6,552,686 B2 to Ollikainen
- r. U.S. patent no. 6,456,249 B1 to Johnson et al.
- s. U.S. patent no. 6,429,818 B1 to Johnson et al.
- t. U.S. patent no. 6,166,694 A to Ying

Communication Information

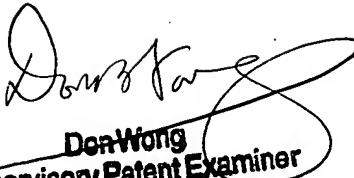
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leith A. Al-Nazer whose telephone number is 571-272-1938. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Don Wong
Supervisory Patent Examiner
Technology Center 2800